PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference U 014764-0	FOR FURTHER ACTION	See item 4 below	
International application No. PCT/US2004/037980	International filing date (day/month/year) 12 November 2004 (12.11.2004)	Priority date (day/month/year) 12 November 2003 (12.11.2003)	
International Patent Classification (8th See relevant information in Form F	n edition unless older edition indicated) PCT/ISA/237		
Applicant MORALI, Anthony			

1.	 This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a). 			
2.	This REPORT consists of a total	of 5 sheets, including this cover sheet.		
		ence to the written opinion of the International Searching Authority should be read as a reference eport on patentability (Chapter I) instead.		
3.	This report contains indications	relating to the following items:		
	Box No. I	Basis of the report		
	Box No. II	Priority		
	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability		
	Box No. IV	Lack of unity of invention		
	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
	Box No. VI	Certain documents cited		
	Box No. VΠ	Certain defects in the international application		
	Box No. VIII	Certain observations on the international application		
4.	The International Bureau will co not, except where the applicant r date (Rule 44bis .2).	mmunicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but nakes an express request under Article 23(2), before the expiration of 30 months from the priority		
	·	Date of issuance of this report 15 May 2006 (15.05.2006)		

Authorized officer

Telephone No. +41 22 338 89 70

Agnes Wittmann-Regis

Facsimile No. +41 22 740 14 35 Form PCT/IB/373 (January 2004)

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland

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From the	TONAL SEARCH	IING AUTH	ORITY						P
To: WILLIAM	I R. EVANS				PCT	WIPO		<u></u>	<u></u>
26 WEST	PARRY LLP 61ST STREET RK, NY 10023			WR INTERNATIO	ITTEN OPINION ONAL SEARCHI	OF TH	E THO	RITY	.
					(PCT Rule 43bi	s.1)			
				Date of mailing (day/month/year)	05 APR 20	05			
"	's or agent's file r	eference		FOR FURTHER	ACTION See paragraph 2 belo	w			
U 014764	-0 nal application No	1.	International filing date	(day/month/year)	Priority date (day/n	nonth/year	?		
PCT/US0		•	12 November 2004 (12		12 November 2003	(12.11.20)03)		
Internatio	nal Patent Classifi	cation (IPC)	or both national classifica	ation and IPC					
IPC(7): H	101L 31/042, 31/0	48, 31/05 an	d US Cl.: 136/251, 244,	291; 52/173.3					
Applicant					•				
MORALI	, ANTHONY								=
1. This	opinion contains i	ndications re	lating to the following ite	ms:					
	Box No. I	Basis of the	e opinion						
	Box No. II	Priority							
	Box No. III	Non-establ	ishment of opinion with r	egard to novelty, inv	entive step and indus	trial applic	abilit	У	
	Box No. IV	Lack of un	ity of invention						
	Box No. V	Reasoned s	statement under Rule 43b ty; citations and explanati	is.1(a)(i) with regard ons supporting such	to novelty, inventive statement	step or in	dustri	al	
	Box No. VI	Certain do	cuments cited						
	Box No. VII	Certain de	fects in the international a	application					

2. FURTHER ACTION

Box No. VIII

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

Certain observations on the international application

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/ US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

Facsimile No. (703) 305-3230

Telephone No. 571-272-1700

Form PCT/ISA/237 (cover sheet) (January 2004)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.	
PCT/US04/37980	

	ATTACK TO A COLUMN TO THE STATE OF THE STATE	101/0501101300
Box No	o. I Basis of this opinion	
it was	regard to the language, this opinion has been established on the basis of filed, unless otherwise indicated under this item. This opinion has been established on the basis of a translation from the	original language into the following language,
	which is the language of a translation furnished for the purposes of inter	mational search (under Rules 12.3 and 23.1(b)).
	regard to any nucleotide and/or amino acid sequence disclosed in ed invention, this opinion has been established on the basis of:	the international application and necessary to the
a.	type of material	
	a sequence listing	
	table(s) related to the sequence listing	
b.	format of material	
	in written format	
	in computer readable form	
c.	time of filing/furnishing	
	contained in international application as filed.	
	filed together with the international application in computer read	able form.
	furnished subsequently to this Authority for the purposes of search	h.
3. 🔲	In addition, in the case that more than one version or copy of a sequifiled or furnished, the required statements that the information in the state application as filed or does not go beyond the application as filed, a	ubsequent or additional copies is identical to that in
4. Additi	ional comments:	
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WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US04/37980

Box No. V Reasoned statement under Rule 43 bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement				
YES				
NO				
YES				
NO				
YES				
NO				

2. Citations and explanations:

Claims 1-8 lack an inventive step under PCT Article 33(3) as being obvious over Hirai (JP 11-13130 A) in view of Dran et al (U.S. Patent 4,321,418). Hirai teaches a handrail structure for a building comprising solar power generation modules (15); a bottom crosspiece (13) which corresponds to the instant bottom rail and which supports the solar power generation module (15) from a portion of the building; and a top rail comprising top crosspiece (12) and coping (14) which together form an outlet conduit that houses interconnection cable (45) for outputting the power of the connected solar cells in said module (15) (see Figures 1, 2, and 4; and paragraphs 0001, 0006, 0021, 0031, and 0034). Figure 1 shows two panels (15), and the top crosspieces (12) and the bottom crosspieces (13) for each panel (15) are connected to each other at support (11), as per instant claim 2. Hirai's structure is a handrail structure, and thus, said top crosspiece (12) and coping (14) clearly form a handrail, as per instant claims 3 and 4. With respect to claims 5-8, the connection of said interconnection cable (45) to the building would have been within the skill of an artisan so that the electricity generated by said solar power generation modules (15) could be used by the building. Hirai teaches the limitations of the instant claims other than the difference which is discussed below.

Hirai does not specifically teach that each of its solar power generation modules (15) comprises the instant glass panels, connected solar cells, and sandwiching transparent or, at least, translucent film between the glass panels. Dran et al teaches a solar panel comprising glass panels (6,7); spaced and connected solar cells (2); and the instant sandwiching film (5) (see Figures 1-4; col. 2, line 65 through col. 3, line 68). Hirai's panel provides the advantage of being free of bubbles and other undesirable heterogeneities (see col. 3, lines 3-4). It would have been obvious to one of ordinary skill in the art to have used Dran et al's solar panel for Hirai's solar power generation module (15) because Dran et al's solar panel provides the advantage of being free of bubbles and other undesirable heterogeneities.

Claims 1-8 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US04/37980

Box No. VII Certain defects i	n the international applica	ntion		
The following defects in the form or contents of the international application have been noted: The description is objected to as containing the following defect(s) under PCT Rule 66.2(a)(iii) in the form or contents thereof: On age 4, at line 11, the term "at180" should be changed to "at 180".				
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Form PCT/ISA/237 (Box No. VII) (January 2004)